

# Honeywell

## Genetron® Refrigerants

### Genetron® AZ-20® R-410A

### Genetron® R-22

### Pressure – Temperature Chart

PSIG			PSIG			PSIG		
(°F)	AZ-20	R-22	(°F)	AZ-20	R-22	(°F)	AZ-20	R-22
-40	10.8	0.6	0	48.3	24.0	40	118.1	68.6
-39	11.5	1.0	1	49.6	24.9	41	120.3	70.0
-38	12.1	1.4	2	50.9	25.7	42	122.7	71.5
-37	12.8	1.8	3	52.2	26.5	43	125.0	73.0
-36	13.5	2.2	4	53.6	27.4	44	127.4	74.5
-35	14.2	2.6	5	55.0	28.3	45	129.8	76.1
-34	14.9	3.1	6	56.3	29.2	46	132.2	77.6
-33	15.6	3.5	7	57.8	30.1	47	134.7	79.2
-32	16.3	4.0	8	59.2	31.0	48	137.2	80.8
-31	17.1	4.5	9	60.7	31.9	49	139.7	82.4
-30	17.8	4.9	10	62.2	32.8	50	142.2	84.1
-29	18.6	5.4	11	63.7	33.8	51	144.8	85.7
-28	19.4	5.9	12	65.2	34.8	52	147.4	87.4
-27	20.2	6.4	13	66.8	35.8	53	150.1	89.1
-26	21.1	6.9	14	68.3	36.8	54	152.8	90.8
-25	21.9	7.4	15	69.9	37.8	55	155.5	92.6
-24	22.7	8.0	16	71.5	38.8	56	158.2	94.4
-23	23.6	8.5	17	73.2	39.9	57	161.0	96.1
-22	24.5	9.1	18	74.9	40.9	58	163.8	98.0
-21	25.4	9.6	19	76.6	42.0	59	166.7	99.8
-20	26.3	10.2	20	78.3	43.1	60	169.6	101.6
-19	27.2	10.8	21	80.0	44.2	61	172.5	103.5
-18	28.2	11.4	22	81.8	45.3	62	175.4	105.4
-17	29.2	12.0	23	83.6	46.5	63	178.4	107.3
-16	30.1	12.6	24	85.4	47.6	64	181.5	109.3
-15	31.1	13.2	25	87.2	48.8	65	184.5	111.2
-14	32.2	13.9	26	89.1	50.0	66	187.6	113.2
-13	33.2	14.5	27	91.0	51.2	67	190.7	115.3
-12	34.2	15.2	28	92.9	52.4	68	193.9	117.3
-11	35.3	15.9	29	94.9	53.7	69	197.1	119.4
-10	36.4	16.5	30	96.8	55.0	70	200.4	121.4
-9	37.5	17.2	31	98.8	56.2	71	203.6	123.5
-8	38.6	17.9	32	100.9	57.5	72	207.0	125.7
-7	39.8	18.7	33	102.9	58.8	73	210.3	127.8
-6	40.9	19.4	34	105.0	60.2	74	213.7	130.0
-5	42.1	20.1	35	107.1	61.5	75	217.1	132.2
-4	43.3	20.9	36	109.2	62.9	76	220.6	134.5
-3	44.5	21.7	37	111.4	64.3	77	224.1	136.7
-2	45.7	22.4	38	113.6	65.7	78	227.7	139.0
-1	47.0	23.2	39	115.8	67.1	79	231.3	141.3

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For more information call us at **1-800-631-8138**

(°F)	PSIG		(°F)	PSIG		(°F)	PSIG	
	AZ-20	R-22		AZ-20	R-22		AZ-20	R-22
80	234.9	143.6	104	334.9	207.7	128	463.2	289.2
81	238.6	146.0	105	339.6	210.8	129	469.3	293.0
82	242.3	148.4	106	344.4	213.8	130	475.4	296.9
83	246.0	150.8	107	349.3	216.9	131	481.6	300.8
84	249.8	153.2	108	354.2	220.0	132	487.8	304.7
85	253.7	155.7	109	359.1	223.2	133	494.1	308.7
86	257.5	158.2	110	364.1	226.4	134	500.5	312.6
87	261.4	160.7	111	369.1	229.6	135	506.9	316.7
88	265.4	163.2	112	374.2	232.8	136	513.4	320.7
89	269.4	165.8	113	379.4	236.1	137	520.0	324.8
90	273.5	168.4	114	384.6	239.4	138	526.6	329.0
91	277.6	171.0	115	389.9	242.8	139	533.3	333.2
92	281.7	173.7	116	395.2	246.1	140	540.1	337.4
93	285.9	176.4	117	400.5	249.5	141	547.0	341.6
94	290.1	179.1	118	405.9	253.0	142	553.9	345.9
95	294.4	181.8	119	411.4	256.5	143	560.9	350.3
96	298.7	184.6	120	416.9	260.0	144	567.9	354.6
97	303.0	187.4	121	422.5	263.5	145	575.1	359.0
98	307.5	190.2	122	428.2	267.1	146	582.3	363.5
99	311.9	193.0	123	433.9	270.7	147	589.6	368.0
100	316.4	195.9	124	439.6	274.3	148	596.9	372.5
101	321.0	198.8	125	445.4	278.0	149	604.4	377.1
102	325.6	201.8	126	451.3	281.7	150	611.9	381.7
103	330.2	204.7	127	457.3	285.4			

**AZ-20 (R-410A) pressure is about 60% (1.6 times) greater than R-22.**

**Only use servicing equipment and components designed for AZ-20 (R-410A).**

- Recovery cylinder service pressure rating 400 psig, e.g. DOT 4BA400 and DOT BW400.
- Manifold sets must be 800 psig high-side and 250 psig low-side with 550 psig low-side retard.
- Use hoses with 800 psig service pressure rating.
- Use filter driers with service pressure rating of at least 600 psig.
- Do not install a suction-line drier in the liquid line.

**ARI color code is rose (PMS color code is 507).**

- Read the label to confirm cylinder contents since lighting conditions may hinder color identification.

**Liquid charge AZ-20.**

- Use a commercial metering device in the manifold hose.

**Use an R-410A TXV on indoor sections originally equipped with a TXV; do not use an R-22 TXV.**

**Existing capillary tube indoor coils will not operate properly.**

**A liquid-line filter drier is recommended.**

**Use a polyol ester (POE) lubricant approved by the equipment manufacturer.**

- POE lubricants are not always interchangeable.
- Minimize exposure of POE lubricant to the atmosphere; use a pump to transfer lubricant.
- Use a filter drier to remove moisture from POE lubricant in the system — a vacuum pump will not work.

**Leak detectors should detect HFC (hydrofluorocarbon) refrigerants.**

- Halide torches will not work effectively.
- Instruments designed for CFCs and HCFCs will not have enough sensitivity for AZ-20.

**Do not vent AZ-20 to the atmosphere.**

**Never pressurize a mixture of air and refrigerant since it may become flammable.**

**Always read the Genetron AZ-20 material safety data sheet (MSDS) before using the material.**